

isc N-Channel MOSFET Transistor
ISCNH363N
FEATURES

- Drain Current : $I_D = 59A @ T_C = 25^\circ C$
- Drain Source Voltage
: $V_{DSS} = 300V(\text{Min})$
- Static Drain-Source On-Resistance
: $R_{DS(on)} = 36m\Omega (\text{Max})$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRIPTION

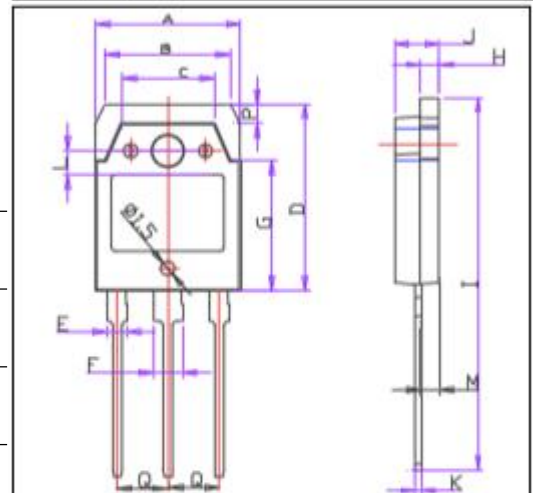
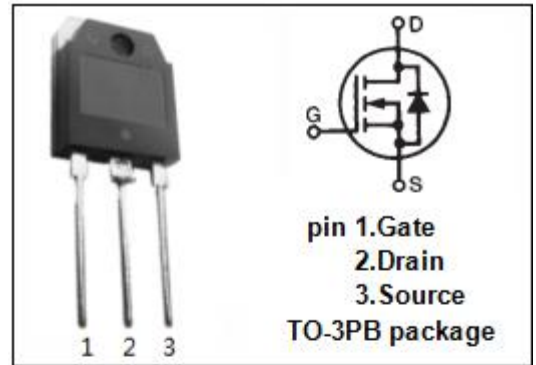
- motor drive, DC-DC converter, power switch and solenoid drive.

ABSOLUTE MAXIMUM RATINGS($T_a = 25^\circ C$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	300	V
V_{GS}	Gate-Source Voltage-Continuous	± 30	V
I_D	Drain Current-Continuous	59	A
P_D	Total Dissipation @ $T_C = 25^\circ C$	235	W
T_J	Max. Operating Junction Temperature	-55~150	$^\circ C$
T_{stg}	Storage Temperature	-55~150	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(j-c)}$	Thermal Resistance, Junction to Case	0.53	$^\circ C/W$



DIM	mm	
	MIN	MAX
A	15.45	15.75
B	13.45	13.75
C	9.45	9.75
D	19.80	20.20
E	2.00	2.20
F	2.95	3.25
G	13.70	14.10
H	1.40	1.60
I	18.45	18.75
J	4.70	4.90
K	0.50	0.70
L	2.20	2.60
M	1.20	1.60
P	1.80	2.20
Q	5.25	5.65

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ELECTRICAL CHARACTERISTICS

T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0; I _D = 0.25mA	300	--	V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = 10V; I _D = 0.25mA	2.0	4.0	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D = 30A	--	36	mΩ
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ±30V; V _{DS} = 0	--	±1.0	uA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = 300V; V _{GS} = 0	--	1.0	uA
V _{SD}	Forward On-Voltage	I _S = 59A; V _{GS} = 0	--	1.4	V

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